

REMARKS

Claims 1-20 are all the claims pending in the application. Claims 1, 3, and 5, have been amended to correct informalities, and to improve the precision of language.

Election of Species Requirement

Applicants hereby elect the species of Fig. 37 for prosecution on the merits. This election is made without traverse. Applicants submit that claims 1-20 are readable on the elected species as follows.

Claim 1 sets forth a sensor that is configured to decrease an output voltage in conjunction with an increase of temperature measured by the sensor. This characteristic is discussed in connection with Figs. 49 and 50, which the Examiner does not identify as belonging to a specific species and, thus, are generic to several species, including that of Fig. 37 (the 18th embodiment).

Additionally, Fig. 37 is described as being an “abnormality detecting apparatus for detecting an abnormality in an axle bearing”. See page 92, lines 18-22. Accordingly, the language in claims 9, 14, and 19, is readable on this embodiment. Further, Fig. 37 includes an NTC thermistor 414, a fixed resistor 415 disposed in parallel with the thermistor 414, and a temperature detection circuit 412 having a resistor 416 for converting an output of the temperature sensor 411 to a voltage. Thus, the embodiment of Fig. 37 includes all of the elements as set forth in the language of claims 2-4, 7-9, 12-14, and 17-19.

Still further, the specification discusses the variations in thermistor (NTC, PTC, CTR, silicon-based, etc) with specific reference to Fig. 37. See page 102, line 10 - page 103, line 1. Thus, the elected species of Fig. 37 also may include PTC and silicon thermistors, as set forth in claim 5.

Further yet, the specification indicates that the 18th to 25th embodiments may be used in combination with a rotation speed sensor and a vibration sensor as in the first to seventeenth embodiments. See page 103, lines 22-25. And at least the 11th embodiment shows the sensor unit 137 as being mounted in the outer bearing ring 104, which makes it part of a “bearing apparatus” as set forth in claims 6, 11, and 16.

Again, page 103 directly mentions rotation and speed sensors as part of the 18th embodiment, which therefore allows inclusion of claims 10, 15, and 20, as readable on the species of Fig. 37.

In light of the above, Applicants submit that claims 1-20 are readable on the elected species of Fig. 37.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.


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